

**WHAT IS CLAIMED IS:**

1. A method of adapting a communication link in a network of radio communication nodes, comprising:
  - 5 sending by a first node a first radio communication;
  - receiving by a second node the first radio communication;
  - estimating by the second node the dynamics of the communications channel;
  - categorizing the dynamics of the communications channel into one of at least two groups, based on the estimate;
  - selecting, based on the chosen group, the use of either closed loop link adaption or open loop adaption of communication link parameters.
2. The method of claim 1, wherein one of the two groups is a static group.
3. The method of claim 1, wherein one of the two groups is a dynamic group.
- 15 4. The method of claim 1, wherein the estimate is based on the received signal strength indicator (RSSI).
5. The method of claim 1, wherein the estimate is based on the signal to noise ratio (SNR).
- 20 6. The method of claim 1, wherein the estimate is based on the symbol error rate (SER).
7. The method of claim 1, wherein the first radio communication includes a message header with a transmission power indicator.
8. The method of claim 1, wherein the communication link parameters comprise at least one of transmit power, modulation type, and forward error correction (FEC).

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9. A method of changing communication link adaption techniques in a network of radio communication nodes, comprising:

- detecting interference based on an open loop metric;
- estimating using an open loop estimator, the channel dynamics; and
- 5 determining, whether transmission parameters should be adjusted based on open loop metrics or closed loop metrics, based on the channel dynamics.

10. The method of claim 9, further comprising:

- adjusting the transmission parameters based on open loop metrics.

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11. The method of claim 10, further comprising:

- adjusting the transmission parameters based on closed loop metrics.

12. The method of claim 1, wherein the open loop estimator uses the received  
15 signal strength indicator (RSSI).

13. The method of claim 1, wherein the open loop estimator uses the signal to  
noise ratio (SNR).

20 14. The method of claim 1, wherein the open loop estimator uses the symbol error  
rate (SER).

15. The method of claim 1, further comprising:

- receiving a radio communication having a message header with a transmission  
25 power indicator.

16. The method of claim 1, wherein the transmission parameters comprise at least  
one of transmit power, modulation type, and forward error correction (FEC).

17. A radio node communication system, comprising:  
a first radio node;  
a second radio node;  
a processor generating an open loop metric to estimate channel dynamics, and  
5 determining, based on the channel dynamics, the transmission parameter adjustments  
based on one of the open loop metrics or closed loop metrics.

18. The system of claim 17, wherein the transmission parameters comprise at  
least one of transmit power, modulation type, and forward error correction (FEC).

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19. The system of claim 17, wherein the first radio node comprises a radio  
transceiver and the second radio node comprises a radio transceiver.

20. The system of claim 17, wherein the estimate utilizes transmission power  
15 indicator information from the first radio node.